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ABSTRACT

Recent litigation indicates that physicians and institutions can be held financially liable for injuries resulting from the use of psychotropic drugs. Several cases have established guidelines regarding the use of pyschotropic drugs, involving: review of drug regimens; upkeep and review of written records; and prescription and administration of psychotropic medication. Litigation has also established the need for informed consent prior to the use of psychotropic drugs. The effects of these drugs on rehabilitation progress of disabled individuals is another legal issue. To help Missouri health agencies in designing a comprehensive medication assessment that considers legal and health implications of psychotropic medication, a national survey was sent to state departments or agencies whose jurisdiction included mentally retarded persons. Responses from 46 states and the District of Columbia indicated that 60 percent of the states required periodic review of psychotropic medication regimens for institutionalized clients. Most states (83 percent) did not allow drugs to be prescribed for an indefinite time period. When a pyschotropic drug was ordered, 87 percent of the states required that the behavior for which the medication was prescribed be explicitly documented. About 90 percent of the states reported that provisions for evaluating the effects of these medications are included in the client's treatment or rehabilitation plan. (CB)

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A REVIEW OF STATEWIDE PRACTICES ON THE USE OF PSYCHOTROPIC MEDICATION

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The purpose of this paper is to discuss the results of a national survey of state developmental disability agencies regarding their state's regulation of psychotropic medication. An extensive interpretation of litigation is used to preface this survey.

The prevalence of psychotropic medication usage among developmentally disabled clients has been reported in the literature as high. Surveys indicate that close to half of the institutionalized clients and approximately 25% of community placed clients have been prescribed these drugs.(9,16,17,21,28) Among mentally ill patients, these neuroleptic drugs have been typically prescribed to alleviate symptoms of schizophrenia (e.g., hallucinations and thought disorders). However, with mentally retarded clients, it has been reported that they are often prescribed psychotropic medications to alter maladaptive behavior, especially of an aggressive or self-injurious type.(19,22)

The efficacy of psychotropic medication for ameliorating these behaviors has, with few exceptions, not been examined by rigorous scientific methods. Early studies utilized small groups of subjects, relied on global descriptions, lacked precise definitions of observed behavior and rarely contained double-blind, placebo-controlled conditions.(2) More controlled research has emphasized a limited usefulness of these drugs in improving maladaptive behavior.(27,30,12) Hyperactivity and self stimulation consistently decreased significantly during drug trials. However, other maladaptive behaviors (e.g., aggressive and stereotypic behavior) manifested no consistent improvement when comparing drug and placebo conditions.

Chronic use of psychotropic medications have recently been associated with four main extrapyramidal side-effects: (1) akathisia, a motor restlessness which is experienced as a subjective desire to be in constant motion--foot tapping, pacing, shifting weight from one foot to another; (2) pseudo-Parkinsonianism, demonstrated with its unique cogioheel rigidity, pinrolling, tremors while at rest; (3) dystonia, severe contraction of one set of skeletal muscles with a concomitant relaxation of the other opposing set of muscles; and (4) tardive dyskinesia, a syndrome of involuntary movements of the facial region (bucco-facial-lingual triad) as well as possibly choreiform (involuntary and rapid) and athetoid (continuous, arhythmic, writhing) movements of the extremities.(10)

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Tardive dyskinesia can persist even after the medication is withdrawn. There is currently no known effective therapy which relieves this discomforting symptom. Surveys have reported a prevalence rate of approximately 20-35% of this syndrome among mentally retarded persons who are taking psychotropic drugs.(26)

Other disquieting side-effects have recently been noted. The use of these drugs has been implicated in interfering with gains in intelligence test scores,(4,25) behavioral programming in independent living skills (as buttoning and fastening clothes),(6) the learning of tasks,(1,33) and the performance of workshop activities.(5,23)

Use of psychotropic drugs by mentally retarded persons presents numerous legal issues. Three major ones have been addressed by various courts. First, are doctors and/or institutions financially liable for injuries proximately resulting from the use of psychotropic medication? If liability does exist, what standards should be followed to minimize liability? Second, if mentally retarded and/or developmentally disabled persons are entitled to habilitation, is legal redress available for the use of psychotropic drugs which limit the ability to learn new information and to retain information or behavior previously acquired? Third, are mentally retarded and/or developmentally disabled persons entitled to refuse psychotropic medication? If such right does exist, must valid consent precede the administration of such drugs? This paper will discuss the results of a national survey in relationship to the first two legal issues.

Regarding the first issue, it appears likely that physicians and institutions will be held financially liable for injuries resulting from the inappropriate use of psychotropic drugs. Clites v. State of Iowa, 322 N.W. 2d 917 (Iowa App. 1982) presents the typical case in which damages would likely be awarded as a result of psychotropic drug use. The mentally retarded plaintiff, Timothy Clites, was awarded $760,165 as compensation for the tardive dyskinesia he developed from psychotropic drugs. The damages were assessed against the state residential facility for the mentally retarded where Timothy had been institutionalized. The court found defendants had been negligent in failing to adhere to the Iowa standard of care which was that care which would be exercised by an ordinary physician in good standing or by a hospital under similar circumstances. Negligence occurred as a result of defendants administering major tranquilizers to Timothy without: evidence indicating the need for such drugs, close monitoring, drug holidays, altering treatment based upon reactions to the drugs, or consulting tardive dyskinesia specialists. The court also premised negligence upon defendants' use of polypharmacy, defendants' use of drugs for convenience, rather than therapy, and defendants' failure to obtain informed consent from Timothy's parents prior to administering psychotropic drugs to him.

Other cases have also resulted in damage awards for plaintiffs injured as a result of psychotropic drug use. The plaintiff in Faigenbaum v. Oakland Medical Center, 373 N.W. 2d 161 (Mich. App. 1985) was awarded damages totalling one million dollars as a result of tardive dyskinesia which developed because defendants were negligent. Relief was predicated upon both medical malpractice, as against the physicians and institutions, and upon a products liability theory, as against the drug companies.

Although Faigenbaum was reversed by the Michigan Court of Appeals, the reversal did not affect plaintiff's $378,000 recovery from private defendants, including six physicians and three drug companies. The case has been appealed to the Michigan Supreme Court. Several other cases have awarded damages to plaintiffs injured by psychotropic drug use. In Sibley v. Board of Supervisors of LSU, 477 So. 2d 1094 (La. 1985) damages to plaintiff were awarded for injuries incurred as a result of medications prescribed to combat side effects from antipsychotic drugs. Although damages were originally limited to $500,000, the Louisiana Supreme Court remanded the case for consideration of whether the award should, pursuant to various legal theories, exceed that amount. Over two million dollars in damages were awarded to a Vietnam veteran who was a tardive dyskinesia victim (Hedin v. USA [Minn. 1986]). A state hospital and a drugstore chain were assessed $315,000 in damages for tardive dyskinesia (Headley v. Hanneken [Ind. 1983]). In Collins v. Cushner (Md. 1980), $125,000 in damages was assessed against the defendant physician, again as a result of tardive dyskinesia. However, in Barclay v. Campbell, 683 S.W. 2d 498 (Tx. App. 1985) relief was denied to a plaintiff who sued under medical malpractice theory for tardive dyskinesia resulting from psychotropic medications. The court held the physician did not violate the duty to reveal drug risks since, based upon expert testimony, the plaintiff was not functioning rationally and thus could not have properly dealt with information about potential medication side effects. He would have suffered greater harm from not taking the psychotropic medication than from taking it. In several of these cases the need to assess clients for adverse side effects to chronic psychotropic drug usage was stressed.

Although the majority of courts examining the question of entitlement to damages for injury resulting from psychotropic drugs have done so based upon a negligence theory of malpractice, a few courts have examined the issue from the perspective of violations of constitutional rights. In Winters v. Miller, 446 F. 2d 65 (2nd Cir. 1971), cert. denied. 404 U.S. 985 (1971), plaintiff alleged a violation of her First Amendment freedom of religion rights by her forcible medication with tranquilizers, among other drugs, despite her objections to medication based upon her tenets as a Christian Scientist. The Second Circuit reversed the lower court's dismissal of the case and remanded for a determination of damages.

Several cases have established guidelines regarding the use of psychotropic drugs. Adherence to these guidelines would, presumably, mitigate claims for damages. Wyatt v. Stickney, 344 F. Supp. 387 (M.D. Ala. 1972), aff'd sub. nom. Wyatt v. Aderholt, 503 F. 2d 1305 (5th Cir. 1974) established guidelines for medication use which have been replicated by several subsequent courts, and include the following: 1) Medications were to be given only upon a physician's written orders; 2) Written records were to be kept in each patient's chart showing medications; 3) Weekly reviews of each resident's drug regimen were to be conducted; 4) Termination dates on all medications were not to exceed 30 days; 5) Patients were to be free of unnecessary or excessive drugs; 6) Written notations were to be kept on the effects of psychoactive drugs on patients; 7) Medication was not to be used as punishment, for staff convenience, as a substitute for a habilitation program, or in quantities interfering with a habilitation program; 8) a trained pharmacist was to review drug regimens and maintain records of drugs dispensed to each resident; 9) Only trained staff were to administer drugs.

A second major case regarding proper use of drugs was Garrity v. Gallen, 522 F. Supp. 171 (D.N.H. 1981). Like Wyatt, Garrity required that prescriptions of psychotropic drugs be reviewed monthly; that documentation of drug effects on patients be kept; that only trained staff administer drugs; and that drugs not be used excessively, for punishment, for staff convenience, as a substitute for treatment, or in quantities interfering with habilitation. In addition to those requirements, Garrity mandated that written policies regarding drug administration be formulated by defendants and methods be devised to reduce errors in dispensing drugs. Further, psychotropic drugs were to be prescribed based only upon documented individual needs and administered only in accordance with a comprehensive program, incorporated into each resident's individual service plan, designed to meet that individual's needs. Finally, expressing its concern with the excessive use of drugs, the court ordered that each resident be evaluated for possible dosage reduction.

Similar, although slightly different, standards had been adopted in Wuori v. Zitnay (D. Maine 1978). That consent decree directed, among other requirements, that: 1) psychotropic drugs were to be used only as part of a habilitation plan designed to result in less restrictive treatments and, ultimately, in the elimination of behaviors for which drugs were employed; 2) physicians were to state reasons for medication choices, including balancing therapeutic effects against potential adverse effects and the reasons non-medication techniques were considered inadequate; 3) a lay explanation of the reasons for the medication, possible benefits, and potential consequences be given to the resident and his or her significant other, such as parent or guardian.

Litigation has also established the need for informed consent prior to the use of psychotropic drugs. Also, physicians must become aware of drug package inserts warning of the need to discontinue medication in the presence of tardive dyskinesia or certain other adverse side effects. These guidelines, in conjunction with those set forth in the discussed cases, constitute general rules for the proper use of psychotropic drugs by the mentally retarded and/or developmentally disabled population.

Another major issue to be explored is whether mentally retarded and/or developmentally disabled persons are entitled to habilitation and to legal redress for the administration of psychotropic drugs which limit their abilities to be habilitated. Discussion of habilitation rights for mentally retarded persons must begin with the Supreme Court case of Youngberg v. Romeo, 457 U.S. 307 (1982). The Court, after emphasizing that the difficult question of whether mentally retarded persons are entitled to training per se was not presented by the case, found that such persons were entitled to training or habilitation necessary to secure their rights to be free from undue restraint and to safety. Justice Blackmun, in a concurring opinion, expressed a willingness to consider an argument that mentally retarded persons were also entitled to training and habilitation necessary to prevent deterioration of skills.

Lower court decisions both prior to and subsequent to Youngberg recognized the danger of regression posed by the failure to provide adequate habilitation programs for mentally retarded persons. In New York Association for Retarded Children v. Carey, 393 F. Supp. 715 (E.D.N.Y. 1975)

affirmative programming was ruled necessary if regression of mentally retarded persons was to be prevented. Regression was stated as one of the greatest dangers for severely and profoundly retarded persons in Battle v. Commonwealth of Pennsylvania, 629 F. 2d 269 (3rd Cir. 1980), cert. denied 452 U.S. 968 (1981). Conditions in the institution were judged as having caused regression among mentally retarded residents in Association for Retarded Citizens of North Dakota v. Olson, 561 F. Supp. 473 (D.N.D. 1982), aff'd. 713 F. 2d 1384 (8th Cir. 1983). Affirmative relief was granted in the above cases, at least partially, to address the problem of regression identified by the courts.

Olson is also significant in its expansive interpretation of Youngberg's finding that the 14th Amendment protects a retarded person's freedom from restraint. Olson found that freedom from restraint must include a determination of whether professional judgment was being exercised in the use of medication to restrain residents. Further, Olson held the 14th Amendment and state statute guaranteed mentally retarded persons minimally adequate treatment and care in a setting which was the least restrictive alternative for the individual. To enforce this right to treatment, the court included in its order a limitation on drug use. It summarized a resident's liberty interests in training: "Given the great difference that minimum self care skills make in the life of most mentally retarded persons, this court regards the acquisition and maintenance of those skills as essential to the exercise of basic liberties." Id. at 487. If psychotropic drugs interfered with skills acquisition, this court would order drug use be limited.

Other lower courts, prior to Youngberg, had also held that mentally retarded persons were entitled to habilitation and training. Wyatt v. Stickney, supra, was again a leading case. That court found mentally retarded persons constitutionally entitled to habilitation, the "process by which the staff of the institution assists the resident to acquire and maintain those life skills which enable him to cope more effectively with the demands of his own person and of his environment and to raise the level of his physical, mental, and social efficiency" (344 F. Supp. at 395). In its order, the court prohibited use of medication which would interfere with such habilitation. In Michigan Association for Retarded Citizens v. Smith, 475 F. Supp. 990 (E.D. Mich. 1979), adequate habilitation was required to afford a reasonable opportunity for mentally retarded persons to acquire and maintain skills necessary to enable the individual to cope as effectively as his or her capacities permit; Similarly, Welsch v. Likins, 373 F. Supp. 487 (D. Minn. 1974) ruled mentally retarded persons are entitled to treatment which can improve their lives, providing for growth and development.

In discussing habilitation rights, the Supreme Court case of Pennhurst v. Halderman, 451 U.S. 1 (1981) should also be mentioned. That case twice presented the Court with an opportunity to address the question of mentally retarded persons' rights to habilitation in the least restrictive setting. Each time, however, the Court bypassed the substantive question, ruling only upon procedural matters. Although the Supreme Court did not rule on the habilitation question in Pennhurst, the Third Circuit in that case quite clearly expressed its belief that such right did exist. In its second Pennhurst decision, the Third Circuit concluded that the Pennsyl-

vania Supreme Court case of In re Schmidt, 429 A. 2d 631 (Pa. 1981) required habilitation in the least restrictive environment for mentally retarded persons.

Although the Third Circuit decision was reversed and remanded by the Supreme Court in Pennhurst II, 465 U.S. 89 (1984) it appears plaintiffs ultimately received relief which they originally sought. The parties agreed that Pennhurst was to be closed by July 1, 1986, an apparent concession by defendants that plaintiffs were entitled to habilitation in the least restrictive environment.

If a right to habilitation does exist, the next question to be answered is whether drugs which interfere with that right will be prohibited. Several courts specifically reached that conclusion (e.g., Olson, Wyatt). Proof that drugs are interfering with habilitation, especially absent a balancing benefit such as improved behavior, would probably move a court to order appropriate relief.

A national survey, sent to state departments or agencies whose jurisdiction included mentally retarded persons, was initiated to assist the state in designing a comprehensive medication assessment and to examine the current practices of other states in regard to these issues. Comparison between these state practices should enhance recommendations on improving existing regulations on the use of psychotropic medication with mentally retarded persons. Forty-six states and the District of Columbia returned the questionnaire together with relevant statutes, regulations and department operating manuals. This represents a return rate of 92%. Preliminary findings were sent to each state to allow for their review and verification. Twelve states made changes in their responses.

The first legal issue concerned the adverse side effects which can accompany the chronic use of psychotropic medication. A number of plaintiffs have been awarded damages as a result of tardive dyskinesia. The onset of this syndrome can be insidious and difficult to detect. A number of instruments have been validated for the assessment of tardive dyskinesia in mentally ill clients [e.g., AIMS,(14,11) and Simpson Tardive Dyskinesia Scales(28)]. One instrument was specifically designed for mentally retarded clients [Dyskinesia Identification System-Coldwater--DIS-CO(30)].

About a third of the states now require formal assessment of institutionalized clients who are administered psychotropic drugs to detect symptoms of tardive dyskinesia. A few states mandate specific instruments which must be included in the client's medical chart (e.g. Texas, Minnesota, and New Jersey). Others (e.g., Illinois, Michigan) merely state that an assessment must be conducted. Idaho recognizes the difficulty in accurately and reliably assessing this syndrome and requires two independent raters to judge each client.

Questions were designed to address state responses to the legal issues regarding assessment of drug side-effects, informed consent, criteria for drug prescription and evaluation of its continuance. In addition, the conditions under which a client has a right to refuse medication in a non-emergent situation was queried. The states' responses to survey questions discussed in this paper can be found on Table I.

Drug free holidays were noted in several judicial rulings. In Clites v. State of Iowa, supra, the lack of a drug free holiday was one issue mentioned in the decision ruling the state negligent. A drug free holiday of "a period . . . of no less than 20 days" was decreed in Welsch v. Likins (No. 4-72-451 (D. Minn. April 15, 1976 order). While the medical literature clearly reports compelling evidence that withdrawal from these drugs often unmasks the symptoms of tardive dyskinesia,(13,7,19) the beneficial effects of drug free holidays are disputed. These lapses in pharmacological therapy have been implicated in leading to irreversible forms of tardive dyskinesia.(3,8,18) To withdraw a client from a neuroleptic medication is not an innocuous procedure. Symptoms reported in the literature [termed nondyskinetic withdrawal symptoms by Gualtieri and his colleagues,(13)] include mainly those of a gastrointestinal nature as nausea, vomiting, anorexia and weight loss.(20)

Ten states (21%) require drug free holidays for institutionalized clients on psychotropic medications. Only 2 states have this requirement for community placed clients. The scope of these regulations varies widely between states. For example, Texas and Alaska require withdrawal if tardive dyskinesia is present or suspected, while Florida, Maine, and New York require at least one drug-free period per year.

Several cases (e.g. Wyatt v. Stickney) required close monitoring and independent review of drug regimens. One survey question queried states on whether there was a review committee which examined the records of clients who were prescribed psychotropic drugs.

Periodic review of psychotropic medication regimens were required by 60% of the states for institutionalized clients. The composition of these groups varied but typically included a pharmacist, medical staff and sometimes a behavioral psychologist. Some jurisdictions monitored institutional dispensing and use of these drugs at least quarterly (e.g., Missouri), some (e.g., Arkansas, California) reviewed each client's protocol annually and others also examined cases in depth on a randomly selected basis (e.g., District of Columbia).

Another common court order limits the prescription duration of mind-altering drugs. Most states (83%) similarly did not allow drugs to be prescribed for an indefinite time period. There was a wide dispersion, however, in the limits that were placed. A maximum period of 30 days or less was allowed by Illinois, Missouri, and New Mexico. A considerably longer time, 120 days, was permitted by Michigan.

In response to the second major legal issue raised by the multitude of litigation, whether a client should be given a drug which limits his/her right to be habilitated, the survey attempted to ascertain to what extent behavior for which the drug was prescribed was explicitly stated, and if provisions were made to evaluate effects. Before one can make the determination that a behavior has ameliorated or regressed, an operational definition and adequate measure of that behavior should be made prior to the institution of any drug regimen. Repeated observation of the targeted behavior comparing pre-administration levels with current behavior allows for a quantitative assessment of the effect of the medication.

When a psychotropic drug is ordered most states (87%) require that the behavior for which the medication is being prescribed be explicitly stated. Similarly, about 90% of the states reported that provisions for evaluating the effects of these medications were included in the client's treatment or habilitation plan. For 87% of the states behavioral changes had to be noted in the client's medical record. These percentages for community based clients were significantly lower (53%, 60%, and 61% respectively).

Some states (e.g., Michigan and New Jersey) now require a quantifiable baseline of the targeted behavior to be changed prior to the administration of the drug. The effects of the medication are compared with this initial baseline. Minnesota suggests a minimum reduction of 50% in the baseline rate of the target behavior or one standard deviation in difference to continue the drugs.

Some responses (e.g., Arizona, Arkansas, District of Columbia) indicated in their documentation the recognition that drugs can interfere with habilitation and treatment programming. The Florida regulations were perhaps the most specific in their delineation of this problem: "Psychotropic drugs can impair motivation and learning. Therefore, there is always the possibility that negative effects on habilitation and psychosocial treatment outweigh the gains from the drug. This is particularly a risk for mentally retarded persons."

Fifty-eight percent (n=27) of the states reported they had implemented a procedure which could audit compliance with state statutes and regulations. These reviews were conducted through diverse practices. For some states only one segment of their population was audited. The ICF/MR annual audits served as the mechanism for Alaska and Tennessee. Long term care centers are the focus in Arkansas. Many states (e.g., Virginia, New Hampshire) utilize their quality assurance division to determine if the rules on psychotropic drugs are indeed being followed according to regulations. For some states (e.g., Missouri, New York) separate units have been established to audit compliance.

Discussion

The presence of both mental retardation and emotional disturbance in a developmentally disabled population has never been precisely measured. The rate of these dually diagnosed persons has varied considerably from study to study depending on the criteria used to define mental illness. One possible explanation for this is that diagnostic tools, that are typically utilized for measuring psychopathology in mentally ill persons, are often inappropriate, particularly when considering the limited functional and communication skills which are often present. With the recent development of instruments to measure psychopathology in a severely retarded client [e.g., Psychopathology Instrument for Mentally Retarded Adults(24)], it is anticipated that a more precise diagnosis can be made.

In mentally ill persons psychotropic medications are usually prescribed for psychiatric symptoms. Many mentally retarded persons are reportedly prescribed these drugs, not in response to a clear psychiatric disorder, but rather to ameliorate maladaptive behavior (e.g., aggression and self-stimulation). While there are a number of clients who can benefit from these medications,(13,19,30) there is the possibility of serious adverse side-effects which can be quite detrimental to a mentally retarded person. The extrapyramidal symptoms which can appear in chronic usage, especially tardive dyskinesia, appear to affect involuntary movements even after withdrawal of the medication and with no known effective treatment. Evidence is accumulating that, in some individuals, the use of psychotropic drugs can interfere with their normal daily activities, thus decreasing their chances for as normal and productive a life in the least restrictive environment possible.

There are several important areas which should be explored by state agencies. First, do the negative side-effects outweigh the benefit a client receives from taking the medication? A corollary to this is how should these be appraised? Second, considering the rights of the client and the litigation against providers, what are appropriate measures to take to ensure quality care? Third, are there alternate less intrusive methods of altering aberrant behaviors?

To answer the first question quantifiable measures must be recorded in the client's record. A baseline of frequency and severity of target behaviors should be delineated prior to the implementation of a drug regimen. Past attempts to modify this behavior through other techniques should be listed. Records of the client's performance in residential, educational or employment settings should document either improved behavior or regression. Direct observations should be conducted on a regular basis to ascertain changes in the target behavior in all settings. Rigorous evaluation will allow for a more rational, data-based, and documented decision concerning long-term chronic use of psychotropic medications.

Many states have established at least preliminary regulations or operating procedures which require a definable target behavior and evaluation of medication in light of changes on pre-drug baselines for institutionalized clients. However, these rules are in place for significantly fewer community placed clients.

To the second question, what measures should be taken to insure quality care, states need to examine the seriousness of the side-effects of these drugs and monitor their presence in clients whose care lies under their jurisdiction. Regular assessment for the presence of tardive dyskinesian clients on psychotropic medication should be a clear priority based on judicial decision in lawsuits which have been brought because of the existence of this syndrome. Many plaintiffs have been awarded large sums of money for damages due to the failure of a clinician or institution to detect, for an extended period of time, the presence of tardive dyskinesia.

There are several points which should be emphasized in regard to this ongoing monitoring. The symptoms of tardive dyskinesia can be subtle and easily confused with movements of different etiologies (e.g., loose dentures, nervous tics, other neurologic diseases). The phenomena of tardive dyskinesia can be inconsistent, varying with the time of day and stress the client is experiencing. Different parts of the body may be affected at various times.(19) Thus a standardized method of describing these involuntary movements should be regularly used by trained observers. There are a number of formal assessment instruments currently available, one of which is the Dyskinesia Identification System-Coldwater: DIS-CO, designed specifically for use with a mentally retarded population.

When such an assessment concludes that an abnormal movement disorder exists, its etiology should be determined by a competent specialist. Lastly, even if tardive dyskinesia can be shown, the question of whether to continue the medication should be carefully weighed.

The third topic of focus for this discussion examines briefly alternatives to the use of psychotropic medication. Since these drugs are often prescribed for the control of maladaptive behavior, procedures less intrusive should be pursued first. There are a number of environmental and behavioral manipulations which have been shown to effectively manage these problem behaviors. An attempt should be made to utilize and document these treatment modalities prior to the initiation of a drug regimen.

Few evaluations have been published which compare environmental manipulations with the use of drugs to manage behaviors. Two recent studies which addressed this issue found: (1) clients performed better in a token economy program without neuroleptic drugs(6), and (2) that intelligence score increased dramatically under reinforcement conditions when drugs were withdrawn(4). More research is needed comparing these alternatives to drug therapy under rigorously controlled conditions.

In summary, there are many philosophical, legal, and social issues which should be examined when considering the use of psychotropic medications with persons with developmental disabilities. It should always be foremost that the goal of any therapeutic mode should be to assist the individual in achieving as normal and independent a life as possible. If the administration of a psychotropic drug does further this goal for a mentally retarded person, the medicine should be prescribed. If it prohibits the client's achieving a full life, its prescription should be critically examined.

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